WAFER HANDLING APPARATUS AND METHOD OF MANUFACTURING THEREOF

ABSTRACT

A wafer processing device or apparatus, i.e., a heater or an electrostatic chuck, comprises a planar support platen, a support shaft having centrally located bore, and a pair of electrical conductors located in the shaft. In one embodiment, the electrical conductors are concentrically located within the bore of the shaft, with the first electrical lead being in the form of a pyrolytic graphite rod and separated from the outer second graphite electrical lead by means of a pyrolytic boron nitride (pBN) coating. In a second embodiment, the support platen and the support shaft are formed from a single unitary body of graphite. In yet another embodiment of the device of the invention, the connection posts comprise a carbon fiber composite and the exposed ends of the electrical connectors are coated with a protective ceramic paste for extended life in operations.